Table 1: Assess how much variance is explained by transect

Urbanization = Distance to the City Center

Model: Ramets\_early ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + City\_dist + Transect\_ID:City\_dist

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2021 | Family | 0.022 | 7.599 | 52.455 | 1 | **<0.001** |
| Ramets before flowering: 2021 | Population | 0.095 | 25.153 | 0.000 | 1 | 0.5 |

Table 2: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2021 | Block | 54.600 | **<0.001\*\*\*** |
| Subtransect | 0.002 | 0.964 |
| Distance to City Center | 2.900 | 0.089 |
| Subtransect x Distance to City Center | 2.070 | 0.15 |

Table 3: Assess how much variance is explained by transect

Urbanization = Urbanization Score

Model: Ramets\_early ~ Block + (1 | Population) + (1 | Population:Fam\_uniq) + Transect\_ID + Urb\_score + Transect\_ID:Urb\_score

| Variable | Group | Variance | PVE | χ2 | df | p |
| --- | --- | --- | --- | --- | --- | --- |
| Ramets before flowering: 2021 | Family | 0.025 | 8.478 | 52.334 | 1 | **<0.001** |
| Ramets before flowering: 2021 | Population | 0.097 | 25.536 | 0.000 | 1 | 0.5 |

Table 4: Quantify variance explained by transect

| Variable | Predictor | χ2 | p |
| --- | --- | --- | --- |
| Ramets before flowering: 2021 | Block | 56.522 | **<0.001\*\*\*** |
| Subtransect | 0.160 | 0.689 |
| Urbanization Score | 0.781 | 0.377 |
| Subtransect x Urbanization Score | 1.448 | 0.229 |